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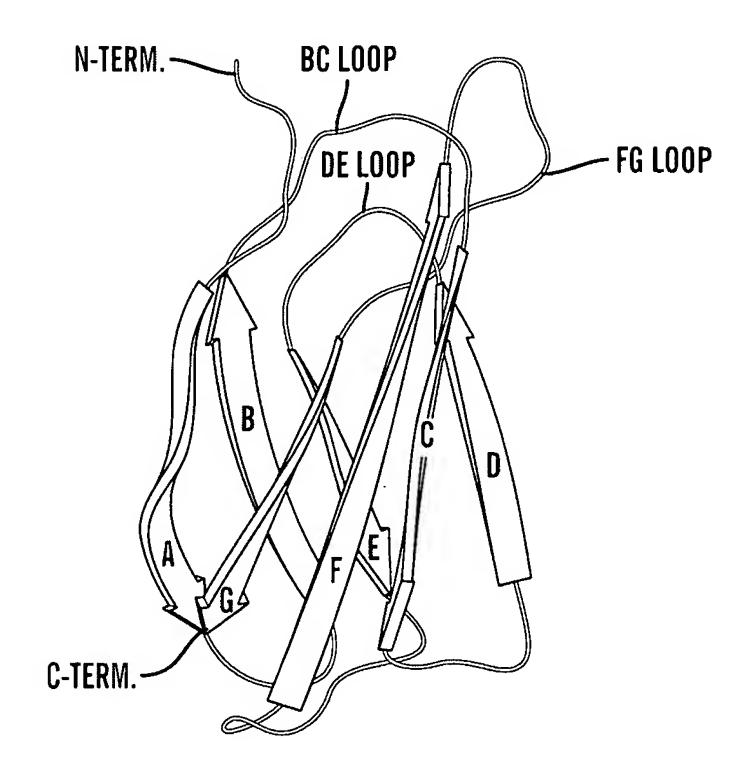


FIG. 1A

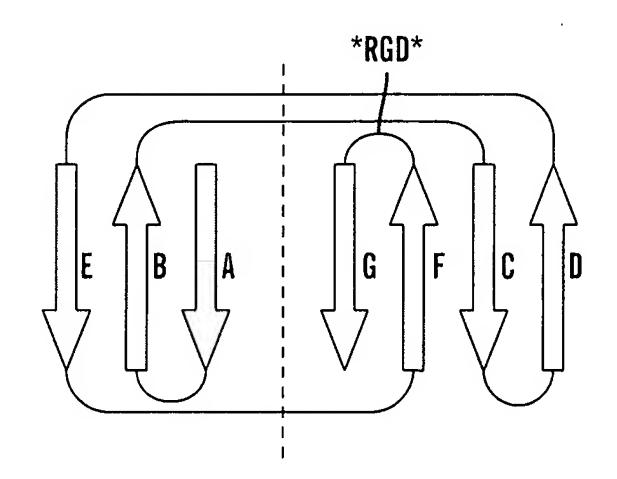
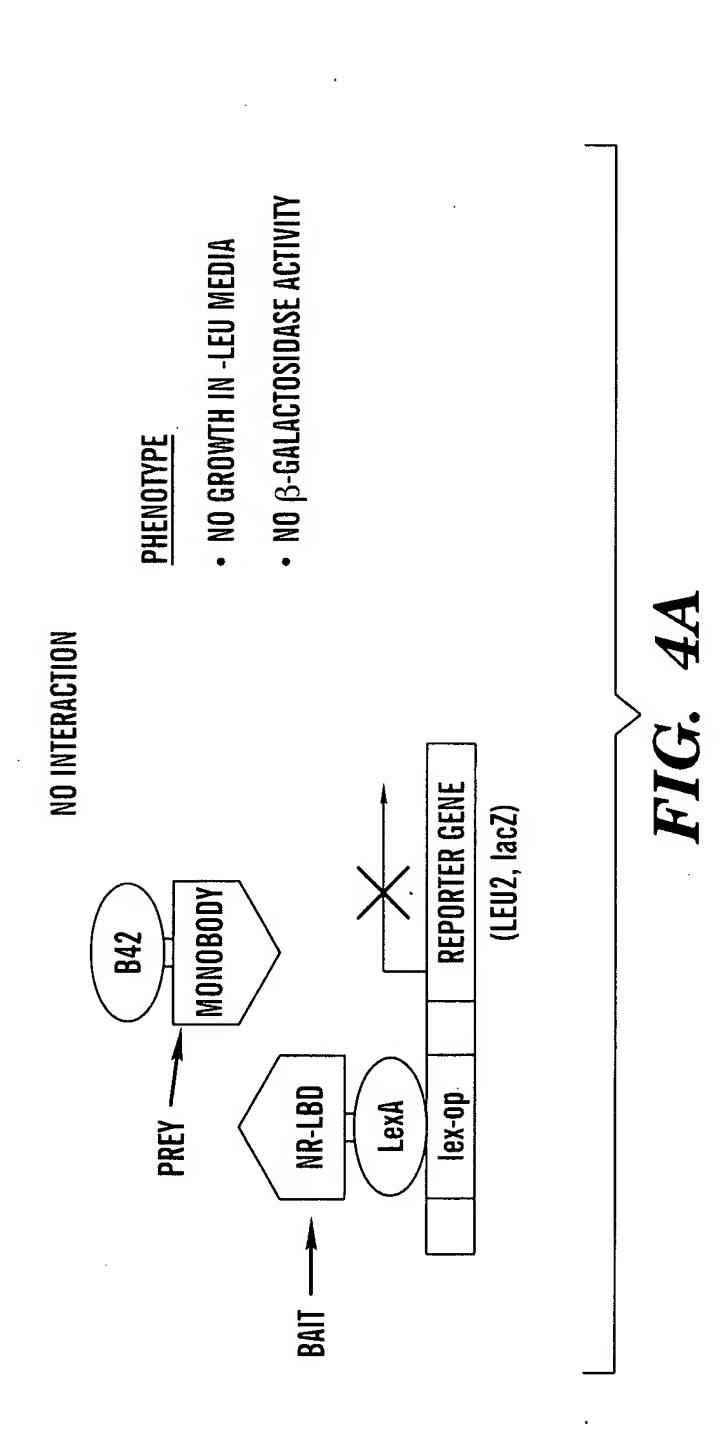
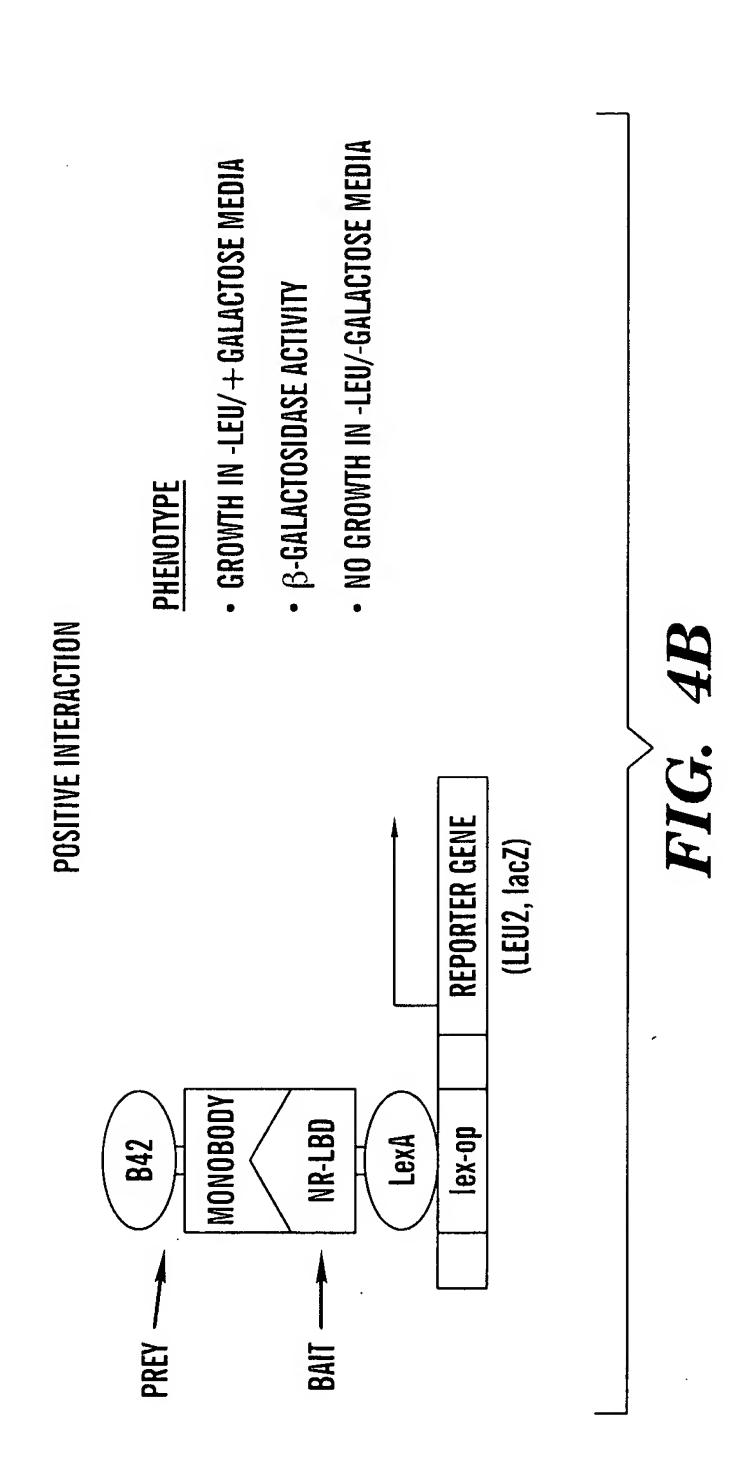


FIG. 1B

NdeI CATATGCAGGTTTCTGATGTTC MetGlnValSerAspValP: -2 -1 1		
Bcli PvuII CTGCTGATCAGCTGGGATGCTC LeuLeuIleSerTrpAspAlaP 20		TACGGT
GAAACCGGTGGTAACTCCCCGG GluThrGlyGlyAsnSerProV 40		
ACCATCAGCGGCCTGAAACCGGGThrIleSerGlyLeuLysProG		1 1
SacI XhoI CGTGGTGACAGCCCAGCGAGCTG ArgGlyAspSerProAlaSerSe 80		TAACTC
BamHI GAGGATCC	•	

ECORI ECORI YYRITYGETG GNSPVQEFTV GNSPVQEFTV XhoI XhoI NYRT 41 91 41 91 Ü YYRITYGETG SPASSKPISI SPASSKPISI SacI SacI U 31 81 31 81 SWDAPAVTVR PGSKSTATIS GLKPGVDYTI TVYAVTGRGD SWDAPAVTVR PGSKSTATIS GLKPGVDYTI TVYAVTGRGD PstI tH Ps 21 [24 21 VSDVPRDLEV VAATPTSLLI VSDVPRXLEV VAATPTSLLI SalI SalI 61 - 61 Ы 51 51 NdeI Ndel МQ MQ





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PvuII

GAAGTTGTTGCTGCGACCCCGACTAGCCTGCTGATCAGCTGGGATGCTCCT**NNKNNKNNK**GluValValAlaAlaThrProThrSerLeuLeuIleSerTrpAspAlaProXaaXaaXaa

EcoRI

NNKNNKTATTACCGTATCACGTACGGTGAAACCGGTGGTAACTCCCCGGTTCAGGAATTC XaaXaaTyrTyrArgIleThrTyrGlyGluThrGlyGlyAsnSerProValGlnGluPhe

SalI

ACTGTACCTGGTTCCAAGTCTACTGCTACCATCAGCGGCCTGAAACCGGGTGTCGACTAT ThrValProGlySerLysSerThrAlaThrIleSerGlyLeuLysProGlyValAspTyr

ACCATCACTGTATACGCTGTTACTGGCNNKNNKNNKNNKNNKNNKNNKTCCAAGCCAATC ThrIleThrValTyrAlaValThrGlyXaaXaaXaaXaaXaaXaaXaaXaaSerLysProIle

KpnI

TCGATTAACTACCGTACCAGTGGTACCGGTGGTTCCCCTCCAAAAAAAGAAGAAGAAAGGTA SerIleAsnTyrArgThrSerGlyThrGlyGlySerProProLysLysAygLysVal

GCTGGTATCAATAAAGATATCGAGGAGTGCAATGCCATCATTGAGCAGTTTATCGACTAC AlaGlyIleAsnLysAspIleGluGluCysAsnAlaIleIleGluGlnPheIleAspTyr

CTGCGCACCGGACAGGAGATGCCGATGGAAATGGCGGATCAGGCGATTAACGTGGTGCCG LeuArgThrGlyGlnGluMetProMetGluMetAlaAspGlnAlaIleAsnValValPro

GGCATGACGCCGAAAACCATTCTTCACGCCGGGCCGCCGATCCAGCCTGACTGGCTGAAA GlyMetThrProLysThrIleLeuHisAlaGlyProProIleGlnProAspTrpLeuLys

TCGAATGGTTTTCATGAAATTGAAGCGGATGTTAACGATACCAGCCTCTTGCTGAGTGGA SerAsnGlyPheHisGluIleGluAlaAspValAsnAspThrSerLeuLeuLeuSerGly

XhoI SphI GATTAACTCGAGGCATGC Asp•••

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ATGGGTAAGCCTATCCCTAACCCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAAGAAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCGIleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACGTGGTGCCGGGCATGACGCCGAAAACCATTCTTCACGCCGGGCCG AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTCATGAAATTGAAGCGGATGTTAAC ProlleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn KpnI

HindIII SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CAGGTTTCTGATGTTCCGACCGACCTGGAAGTTGTTGCTGCGACCCCGNNSNNSNNSNNSNSS GlnValSerAspValProThrAspLeuGluValValAlaAlaThrProXaaXaaXaaXaa

PvuII PstI

NNSNNSACTAGCCTGCTGATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTAC
XaaXaaXaaThrSerLeuLeuIleSerTrpAspAlaProAlaValThrValArgTyrTyr

EcoRI

CGTATCACGTACGGTGAAACCGGTGGTAACTCCCCGGTTCAGGAATTCACTGTACCTGGT ArgIleThrTyrGlyGluThrGlyGlyAsnSerProValGlnGluPheThrValProGly

SalI

TCCAAGTCTACTGCTACCATCAGCGGCCTGAAACCGGGTGTCGACTATACCATCACTGTA SerLysSerThrAlaThrIleSerGlyLeuLysProGlyValAspTyrThrIleThrVal

SacI

TACGCTGTTACTGGCCGTGGTGACAGCCCAGCGAGCTCCAAGCCAATCTCGATTAACTAC TyrAlaValThrGlyArgGlyAspSerProAlaSerSerLysProIleSerIleAsnTyr

XhoI SphI CGTACCTAGTAACTCGAGGCATGC ArgThr•••••

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ATGGGTAAGCCTATCCCTAACCCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAAGAAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCG IleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACGTGGTGCCGGGCATGACGCCGAAAACCATTCTTCACGCCGGGCCG AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTCATGAAATTGAAGCGGATGTTAAC ProIleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn KpnI

HindIII SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CAGGTTTCTGATGTTCCGACCGACCTGGAAGTTGTTGCTGCGACCCCGACTAGCCTGCTGGINValSerAspValProThrAspLeuGluValValAlaAlaThrProThrSerLeuLeu

PvuII

ATCAGCTGGGATGCTCCT**NNKNNKNNKNNKNNK**TATTACCGTATCACGTACGGTGAAACC IleSerTrpAspAlaProXaaXaaXaaXaaXaaTyrTyrArgIleThrTyrGlyGluThr

EcoRI

GGTGGTAACTCCCCGGTTCAGGAATTCACTGTACCTGGTTCCAAGTCTACTGCTACCATC GlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAlaThrIle

SalI

AGCGGCCTGAAACCGGGTGTCGACTATACCATCACTGTATACGCTGTTACTGGCNNKNNK SerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGlyXaaXaa

XhoI SphI

NNKNNKNNKNNKTCCAAGCCAATCTCGATTAACTACCGTACCTAGTAACTCGAGGCA XaaXaaXaaXaaXaaSerLysProIleSerIleAsnTyrArgThr....

TGCATCTAGAGGGCCGCATCATGTAATTAGTTATGTCACGCTTA

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ATGGGTAAGCCTATCCCTAACCCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAAGAAGAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCGIleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACGTGGTGCCGGGCATGACGCCGAAAACCATTCTTCACGCCGGGCCG AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTCATGAAATTGAAGCGGATGTTAAC ProlleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn KpnI

HindIII SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CGTGTTTCTGATGTTCCGCGTGACCTGGAAGTTGTTGCTGCGACCCCGACTAGCCTGCTG ArgValSerAspValProArgAspLeuGluValValAlaAlaThrProThrSerLeuLeu

PvuII

ATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTACCGTATCACGTACGGTGAAACC IleSerTrpAspAlaProAlaValThrValArgTyrTyrArgIleThrTyrGlyGluThr

EcoRI

GGTGGTAACTCCCCGGTTCAGGAATTCACTGTACCTGGTTCCAAGTCTACTGCTACCATC GlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAlaThrIle

SalI

AGCGGCCTGAAACCGGGTGTCGACTATACCATCACTGTATACGCTGTTACTGGCNNKNNK SerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGlyXaaXaa

XhoI SphI
TACCGTACCTAGTAACTCGAGGCATGC
TyrArgThr•••••

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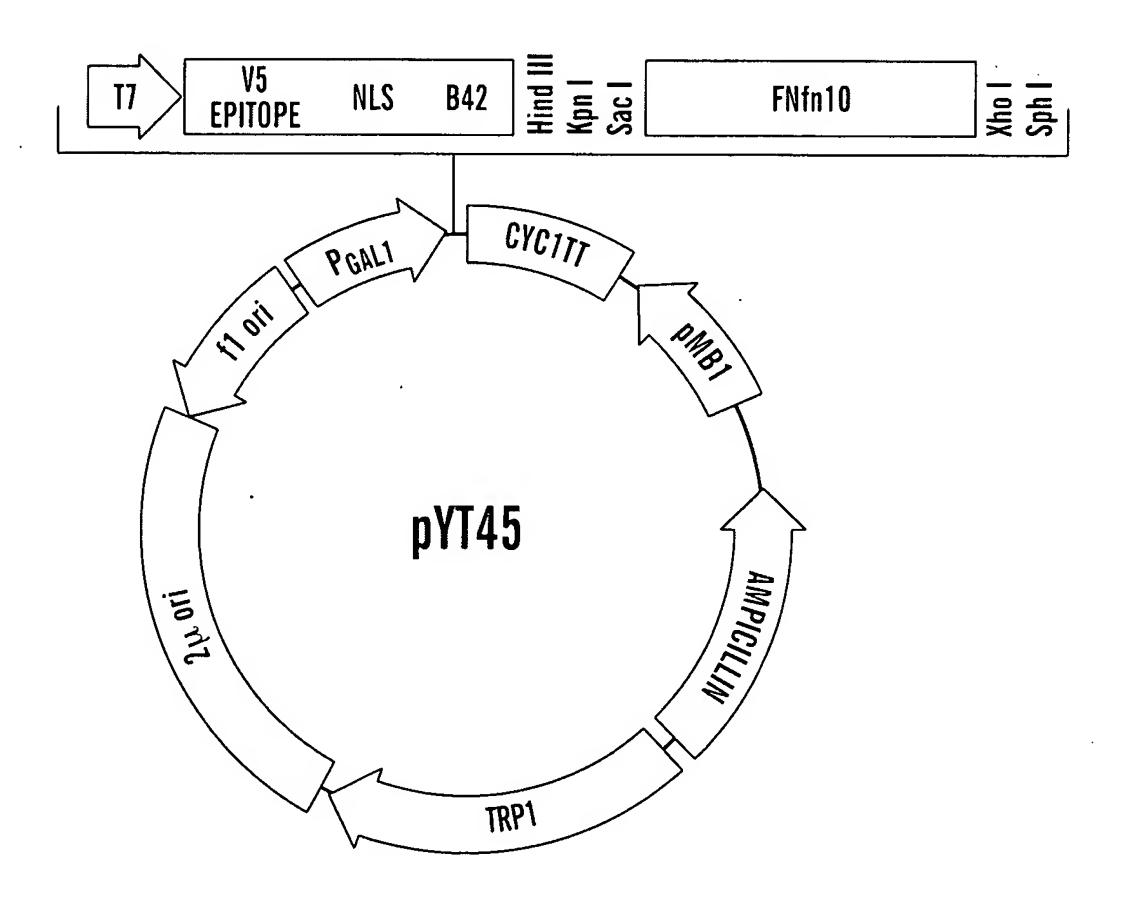


FIG. 9

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ATGGGTAAGCCTATCCCTAACCCTCTCCTCGGTCTCGATTCTACACAAGCTATGGGTGCT MetGlyLysProIleProAsnProLeuLeuGlyLeuAspSerThrGlnAlaMetGlyAla

CCTCCAAAAAAGAAGAGAAAGGTAGCTGGTATCAATAAAGATATCGAGGAGTGCAATGCC ProProLysLysLysArgLysValAlaGlyIleAsnLysAspIleGluGluCysAsnAla

ATCATTGAGCAGTTTATCGACTACCTGCGCACCGGACAGGAGATGCCGATGGAAATGGCGIleIleGluGlnPheIleAspTyrLeuArgThrGlyGlnGluMetProMetGluMetAla

GATCAGGCGATTAACGTGGTGCCGGGCATGACGCCGAAAACCATTCTTCACGCCGGGCCG AspGlnAlaIleAsnValValProGlyMetThrProLysThrIleLeuHisAlaGlyPro

CCGATCCAGCCTGACTGGCTGAAATCGAATGGTTTTCATGAAATTGAAGCGGATGTTAAC ProIleGlnProAspTrpLeuLysSerAsnGlyPheHisGluIleGluAlaAspValAsn

HindIII/KpnI/SacI

GATACCAGCCTCTTGCTGAGTGGAGATGCCTCCAAGCTTGGTACCGAGCTCGGATCTATG AspThrSerLeuLeuLeuSerGlyAspAlaSerLysLeuGlyThrGluLeuGlySerMet

CAGGTTTCTGATGTTCCGACCGACCTGGAAGTTGTTGCTGCGACCCCGACTAGCCTGCTGGInValSerAspValProThrAspLeuGluValValAlaAlaThrProThrSerLeuLeu

PvuII PstI

ATCAGCTGGGATGCTCCTGCAGTTACCGTGCGTTATTACCGTATCACGTACGGTGAAACC IleSerTrpAspAlaProAlaValThrValArgTyrTyrArgIleThrTyrGlyGluThr

EcoRI

GGTGGTAACTCCCCGGTTCAGGAATTCACTGTACCTGGTTCCAAGTCTACTGCTACCATC GlyGlyAsnSerProValGlnGluPheThrValProGlySerLysSerThrAlaThrIle

SalI

AGCGGCCTGAAACCGGGTGTCGACTATACCATCACTGTATACGCTGTTACTGGCCGTGGT SerGlyLeuLysProGlyValAspTyrThrIleThrValTyrAlaValThrGlyArgGly

SacI
GACAGCCCAGCGAGCTCCAAGCCAATCTCGATTAACTACCGTACCTAGTAACTCGAGGCA
AspSerProAlaSerSerLysProIleSerIleAsnTyrArgThr....

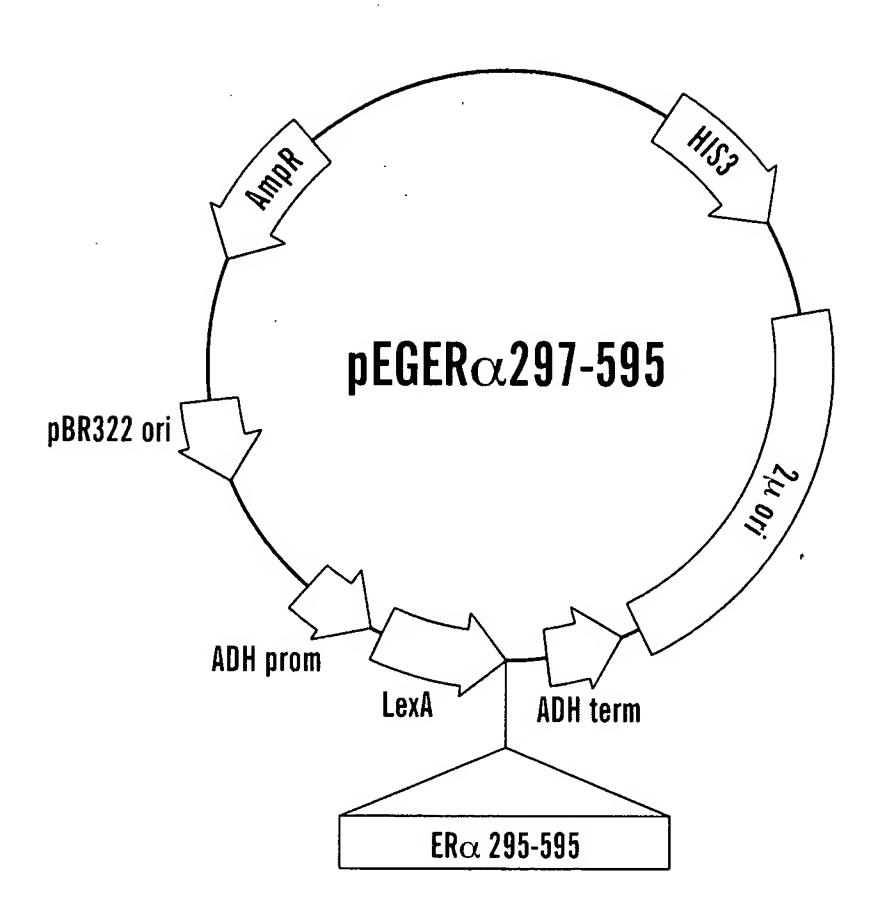


FIG. 11

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ATGAAAGCGTTAACGGCCAGGCAACAAGAGGTGTTTGATCTCATCCGTGATCACATCAGC MetLysAlaLeuThrAlaArgGlnGlnGluValPheAspLeuIleArgAspHisIleSer CAGACAGGTATGCCGCCGACGCGTGCGGAAATCGCGCAGCGTTTGGGGGTTCCGTTCCCCA GlnThrGlyMetProProThrArgAlaGluIleAlaGlnArgLeuGlyPheArgSerPro AACGCGGCTGAAGAACATCTGAAGGCGCTGGCACGCAAAGGCGTTATTGAAATTGTTTCC AsnAlaAlaGluGluHisLeuLysAlaLeuAlaArgLysGlyValIleGluIleValSer GGCGCATCACGCGGGATTCGTCTGTTGCAGGAAGAGGAAGAAGGGTTGCCGCTGGTAGGT GlyAlaSerArgGlyIleArgLeuLeuGlnGluGluGluGluGlyLeuProLeuValGly cgtgtggctgccggtgaaccacttctggcgcaacagcatattgaaggtcattatcaggtc ArgValAlaAlaGlyGluProLeuLeuAlaGlnGlnHisIleGluGlyHisTyrGlnVal GATCCTTCCTTATTCAAGCCGAATGCTGATTTCCTGCTGCGCGTCAGCGGGATGTCGATG AspProSerLeuPheLysProAsnAlaAspPheLeuLeuArgValSerGlyMetSerMet AAAGATATCGGCATTATGGATGGTGACTTGCTGGCAGTGCATAAAACTCAGGATGTACGT LysAspIleGlyIleMetAspGlyAspLeuLeuAlaValHisLysThrGlnAspValArg AACGGTCAGGTCGTTGTCGCACGTATTGATGACGAAGTTACCGTTAAGCGCCTGAAAAAA AsnGlyGlnValValAlaArgIleAspAspGluValThrValLysArgLeuLysLys CAGGGCAATAAAGTCGAACTGTTGCCAGAAAATAGCGAGTTTAAACCAATTGTCGTAGAT GlnGlyAsnLysValGluLeuLeuProGluAsnSerGluPheLysProIleValValAsp CTTCGTCAGCAGAGCTTCACCATTGAAGGGCTGGCGGTTGGGGGTTATTCGCAACGGCGAC LeuArgGlnGlnSerPheThrIleGluGlyLeuAlaValGlyValIleArgAsnGlyAsp SacI

EcoRI HindIII

TGGCTGGAATTCAAGCTTGAGCTCGGCGGCAGCGGTATGATCAAACGCTCTAAGAAGAAC
TrpLeuGluPheLysLeuGluLeuGlyGlySerGlyMetIleLysArgSerLysLysAsn

AGCCTGGCCTTGTCCCTGACGGCCGACCAGATGGTCAGTGCCTTGTTGGATGCTGAGCCC SerLeuAlaLeuSerLeuThrAlaAspGlnMetValSerAlaLeuLeuAspAlaGluPro

HindIII

CCCATACTCTATTCCGAGTATGATCCTACCAGACCCTTCAGTGAAGCTTCGATGATGGGC ProlleLeuTyrSerGluTyrAspProThrArgProPheSerGluAlaSerMetMetGly

FIG. 12A

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TTACTGACCAACCTGGCAGACAGGGAGCTGGTTCACATGATCAACTGGGCGAAGAGGGTG LeuLeuThrAsnLeuAlaAspArgGluLeuValHisMetIleAsnTrpAlaLysArgVal

XbaI

CCAGGCTTTGTGGATTTGACCCTCCATGATCAGGTCCACCTTCTAGAATGTGCCTGGCTA ProGlyPheValAspLeuThrLeuHisAspGlnValHisLeuLeuGluCysAlaTrpLeu

GAGATCCTGATGATTGGTCTCGTCTGGCGCTCCATGGAGCACCCAGTGAAGCTACTGTTTGUILeLeuMetIleGlyLeuValTrpArgSerMetGluHisProValLysLeuLeuPhe

GCTCCTAACTTGCTCTTGGACAGGAACCAGGGAAAATGTGTAGAGGGCATGGTGGAGATC AlaProAsnLeuLeuAspArgAsnGlnGlyLysCysValGluGlyMetValGluIle

PstI

TTCGACATGCTGCTGGCTACATCATCTCGGTTCCGCATGATGAATCTGCAGGGAGAGGAG PheAspMetLeuLeuAlaThrSerSerArgPheArgMetMetAsnLeuGlnGlyGluGlu

TTTGTGTGCCTCAAATCTATTATTTTGCTTAATTCTGGAGTGTACACATTTCTGTCCAGC PheValCysLeuLysSerIleIleLeuLeuAsnSerGlyValTyrThrPheLeuSerSer

ACCCTGAAGTCTCTGGAAGAGAAGGACCATATCCACCGAGTCCTGGACAAGATCACAGAC ThrLeuLysSerLeuGluGluLysAspHisIleHisArgValLeuAspLysIleThrAsp

PstI

ACTTTGATCCACCTGATGGCCAAGGCAGGCCTGACCCTGCAGCAGCAGCAGCAGCAGCGGCTG ThrLeuIleHisLeuMetAlaLysAlaGlyLeuThrLeuGlnGlnGlnHisGlnArgLeu

GCCCAGCTCCTCCTCCTCCCCACATCAGGCACATGAGTAACAAAGGCATGGAGCAT AlaGlnLeuLeuleuleLeuSerHisIleArgHisMetSerAsnLysGlyMetGluHis

CTGTACAGCATGAAGTGCAAGAACGTGGTGCCCCTCTATGACCTGCTGCTGGAGATGCTG LeuTyrSerMetLysCysLysAsnValValProLeuTyrAspLeuLeuLeuGluMetLeu

GACGCCCACCGCCTACATGCGCCCACTAGCCGTGGAGGGGGCATCCGTGGAGGAGACGGAC AspAlaHisArgLeuHisAlaProThrSerArgGlyGlyAlaSerValGluGluThrAsp

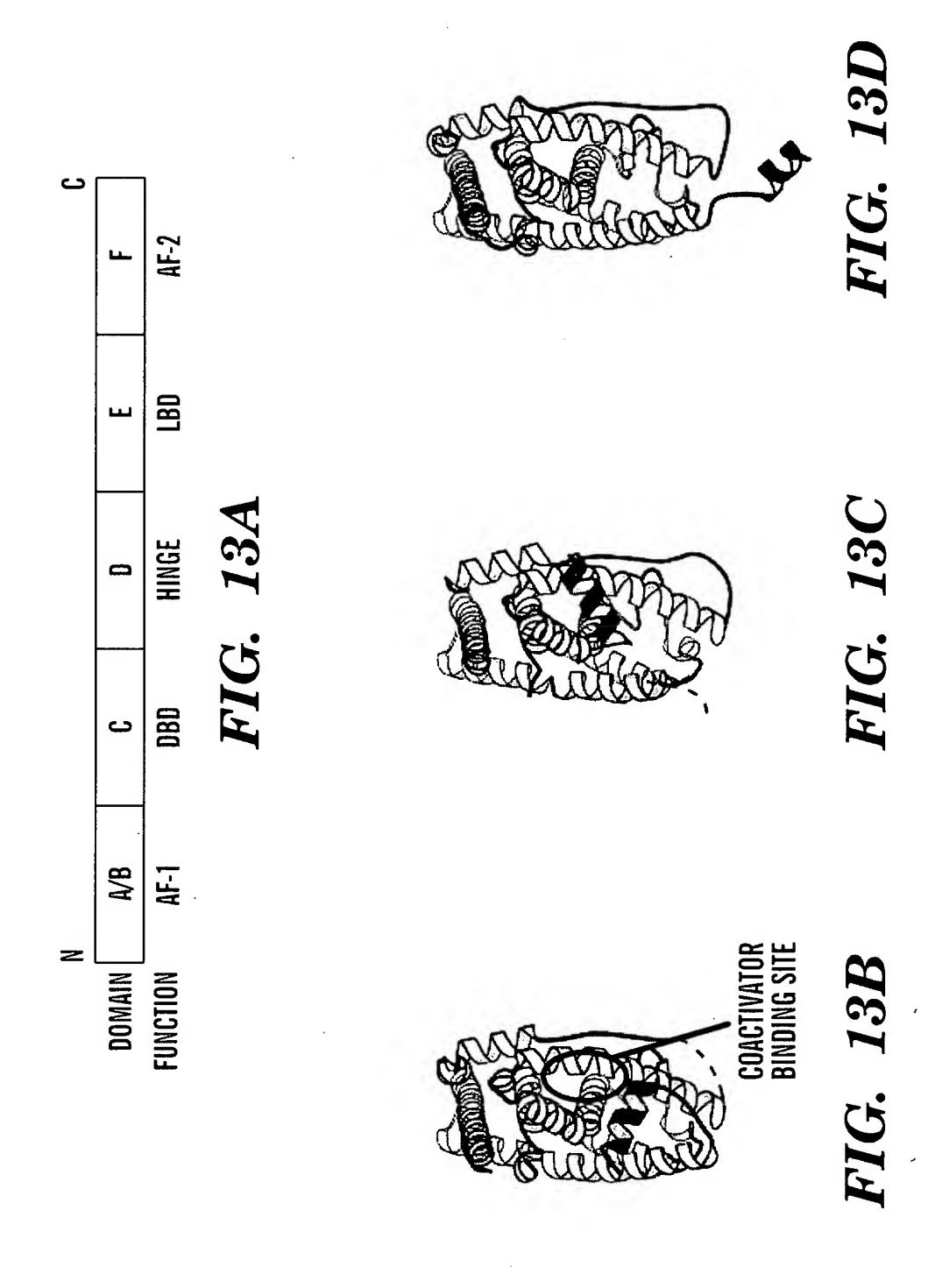
CAAAGCCACTTGGCCACTGCGGGCTCTACTTCATCGCATTCCTTGCAAAAGTATTACATC GlnSerHisLeuAlaThrAlaGlySerThrSerSerHisSerLeuGlnLysTyrTyrIle

XhoI

ACGGGGGAGGCAGAGGGTTTCCCTGCCACAGTCTGACtcgag ThrGlyGluAlaGluGlyPheProAlaThrVal•••

FIG. 12B

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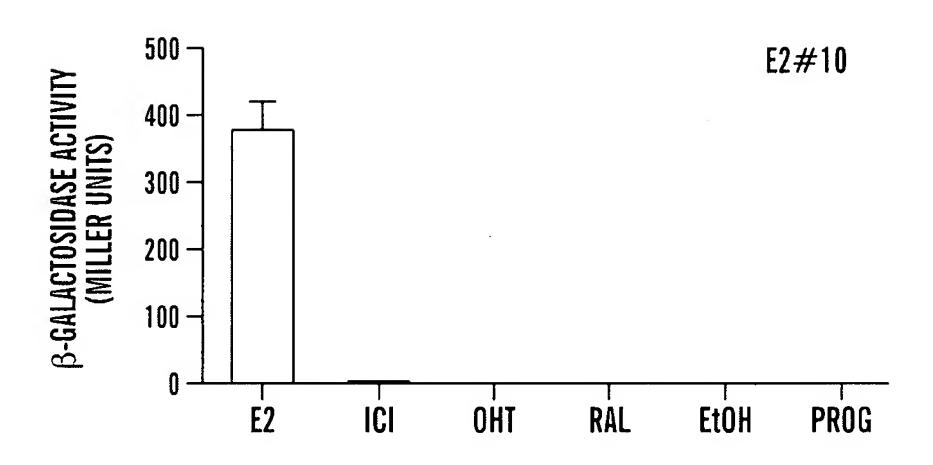


FIG. 14A

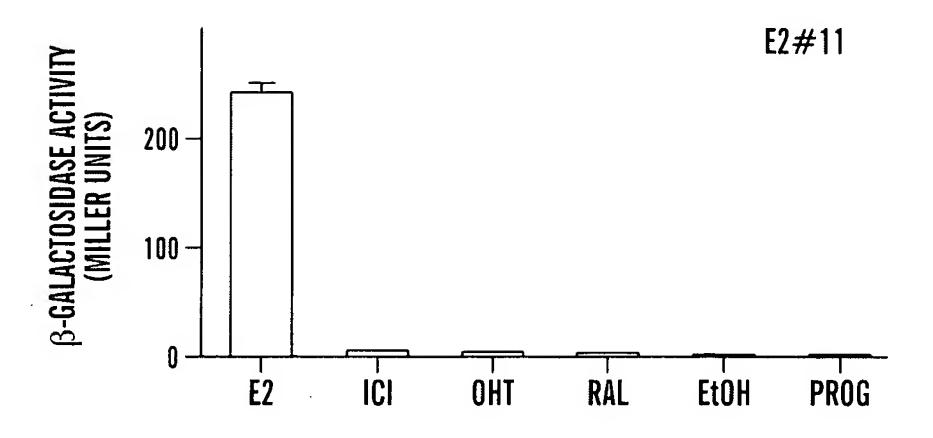


FIG. 14B

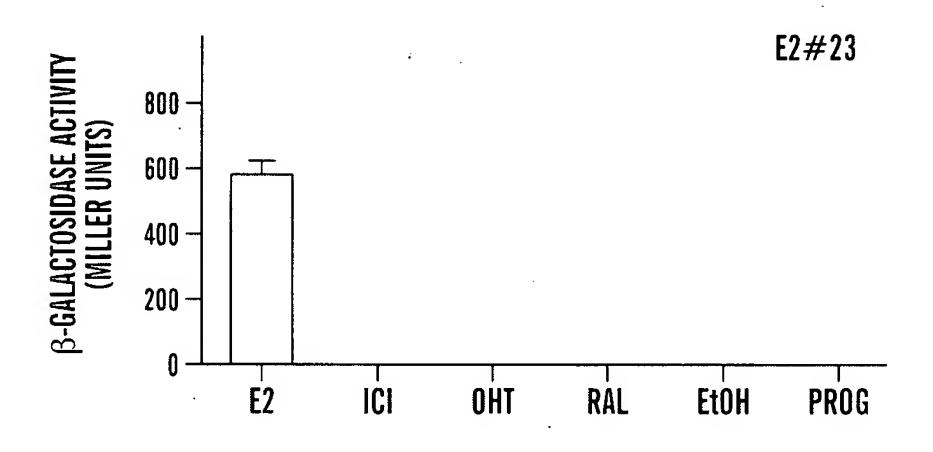


FIG. 14C

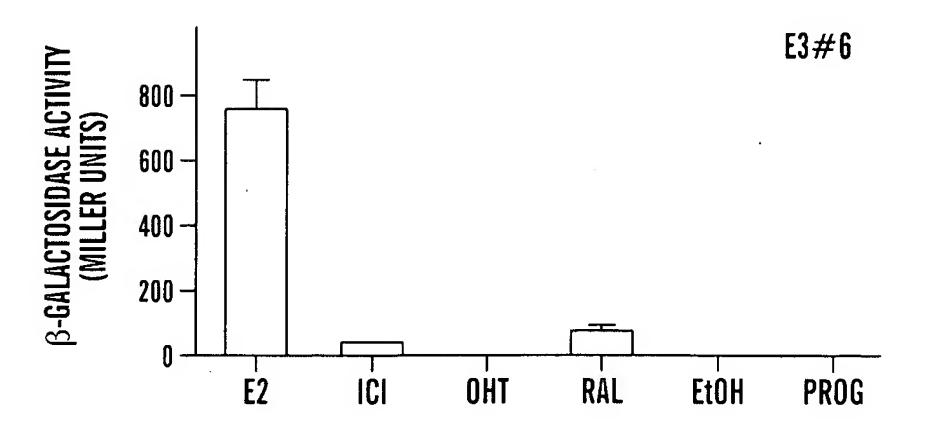


FIG. 14D

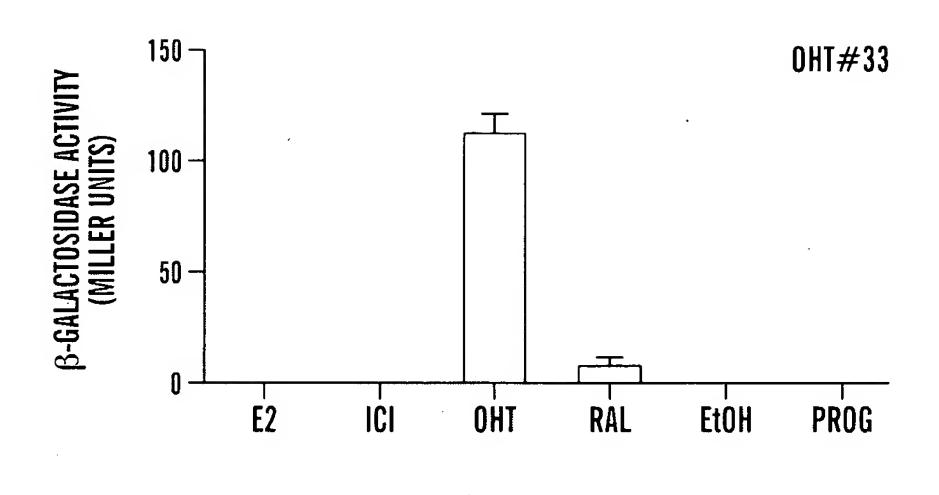


FIG. 14E

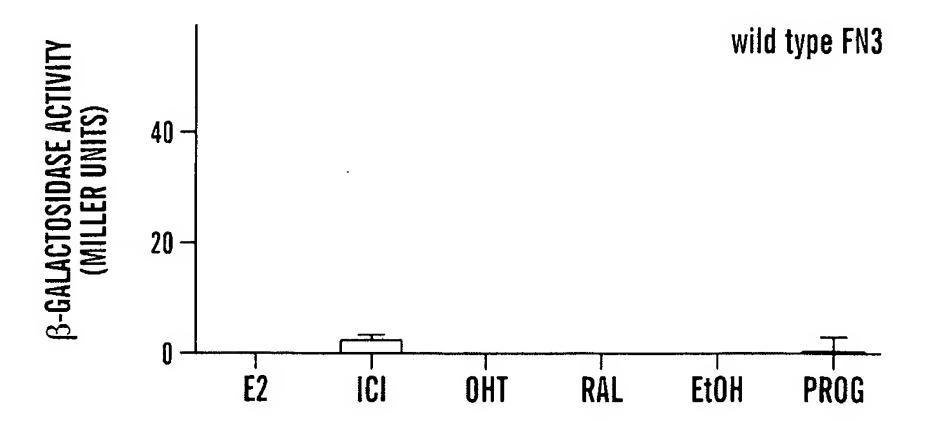


FIG. 14F

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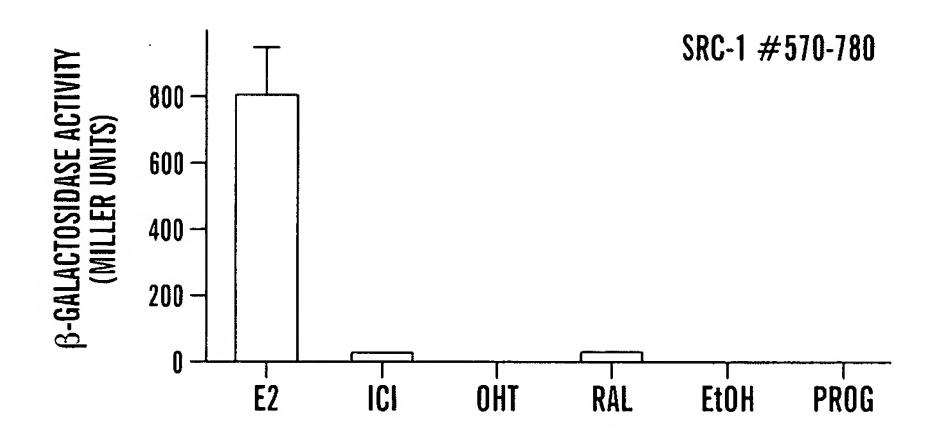


FIG. 14G

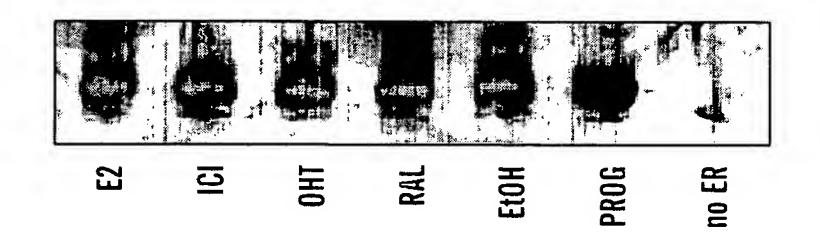


FIG. 14H

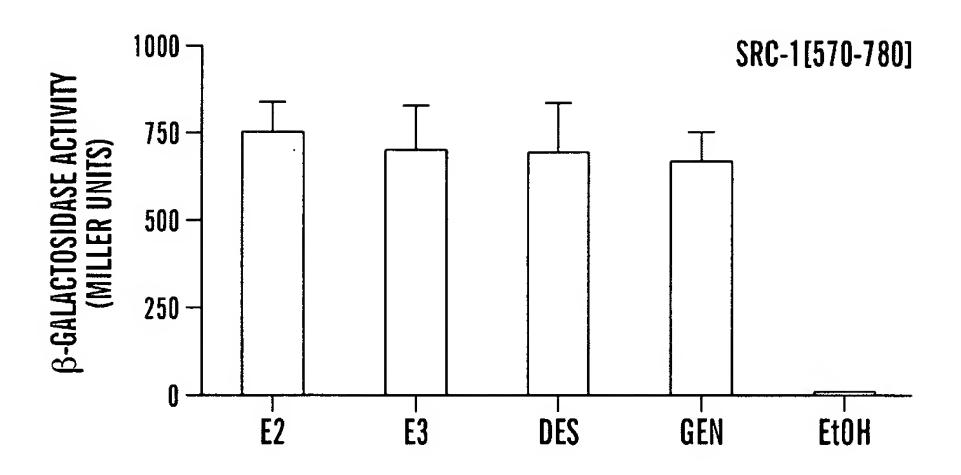


FIG. 15A

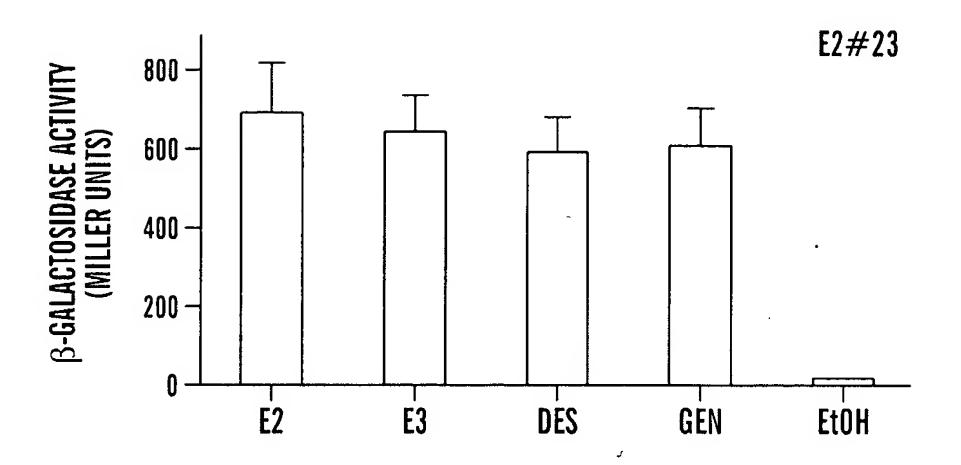


FIG. 15B

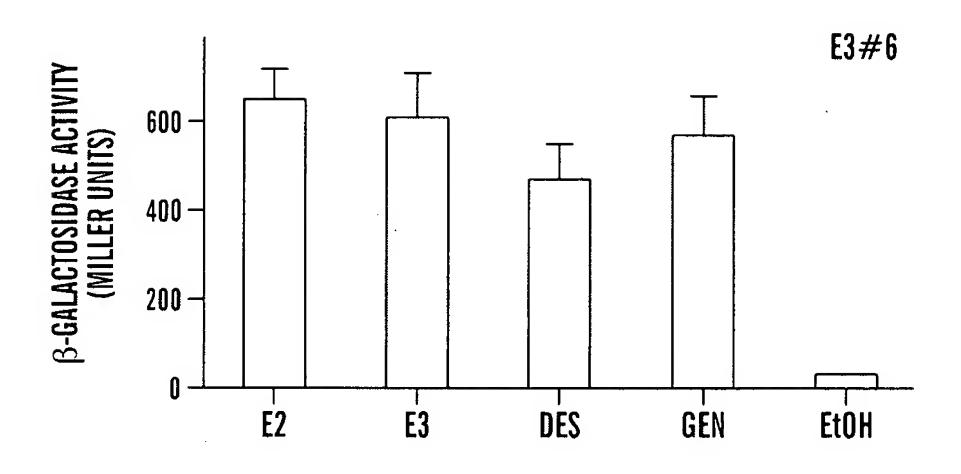


FIG. 15C

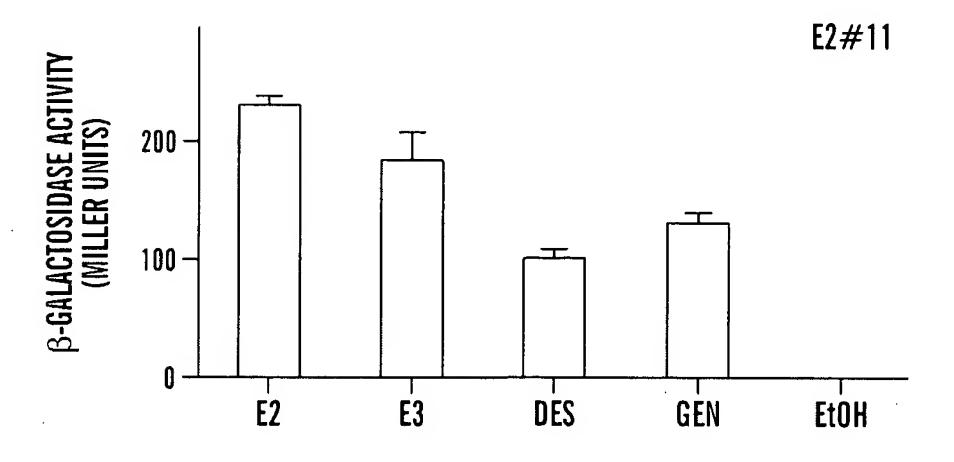


FIG. 15D

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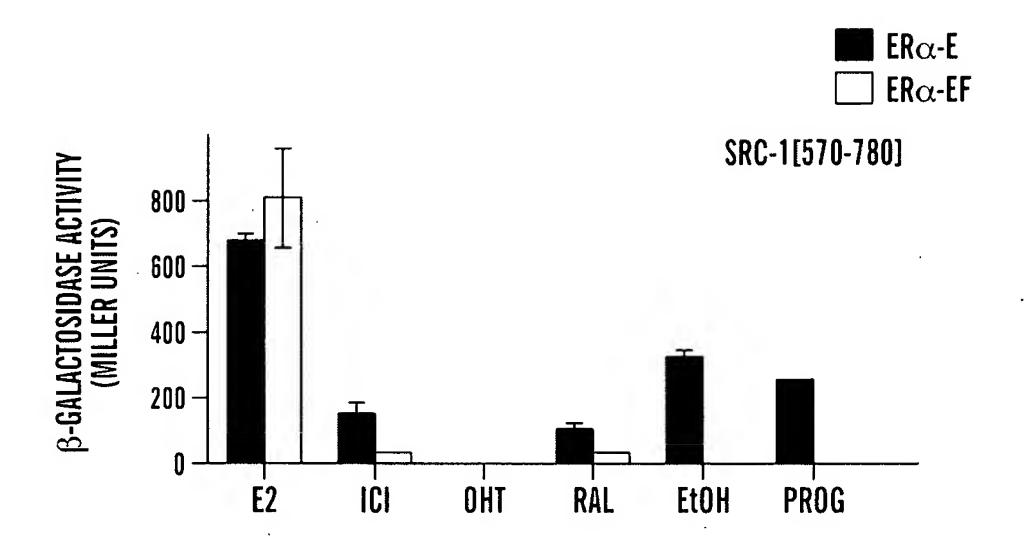


FIG. 16A

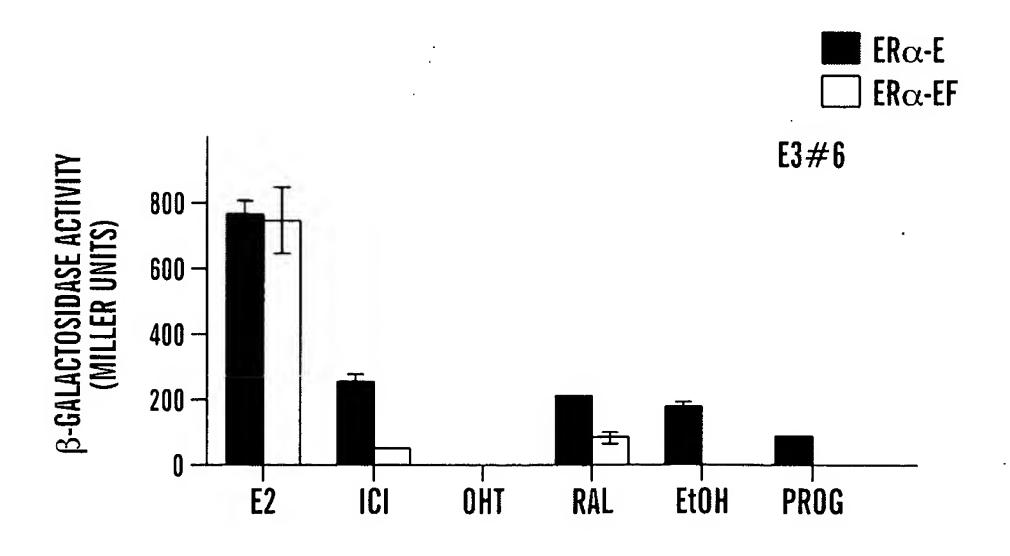
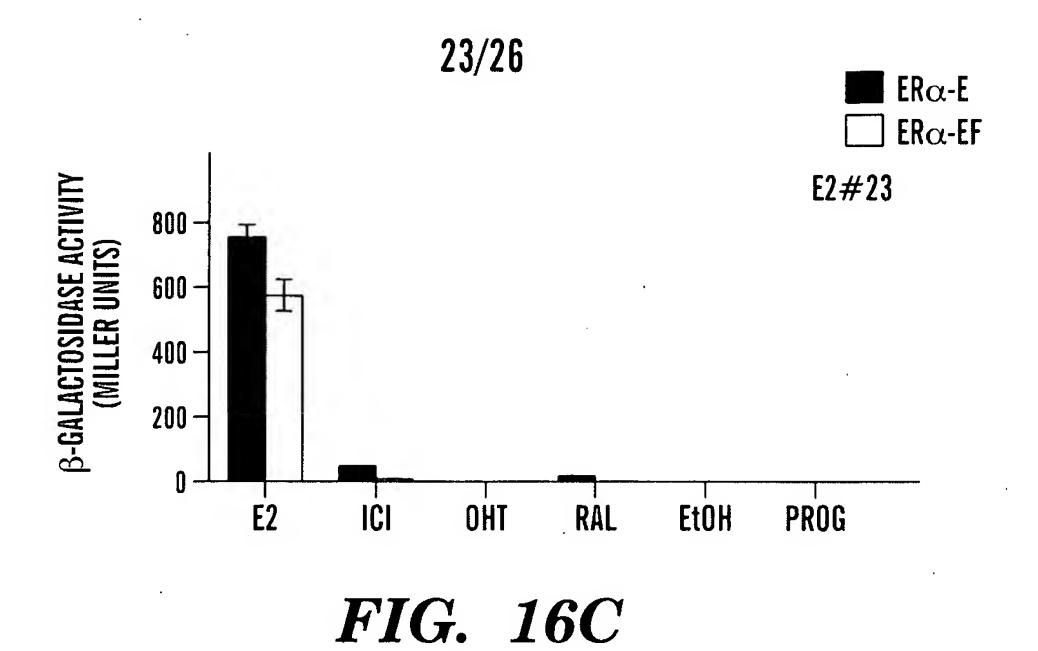
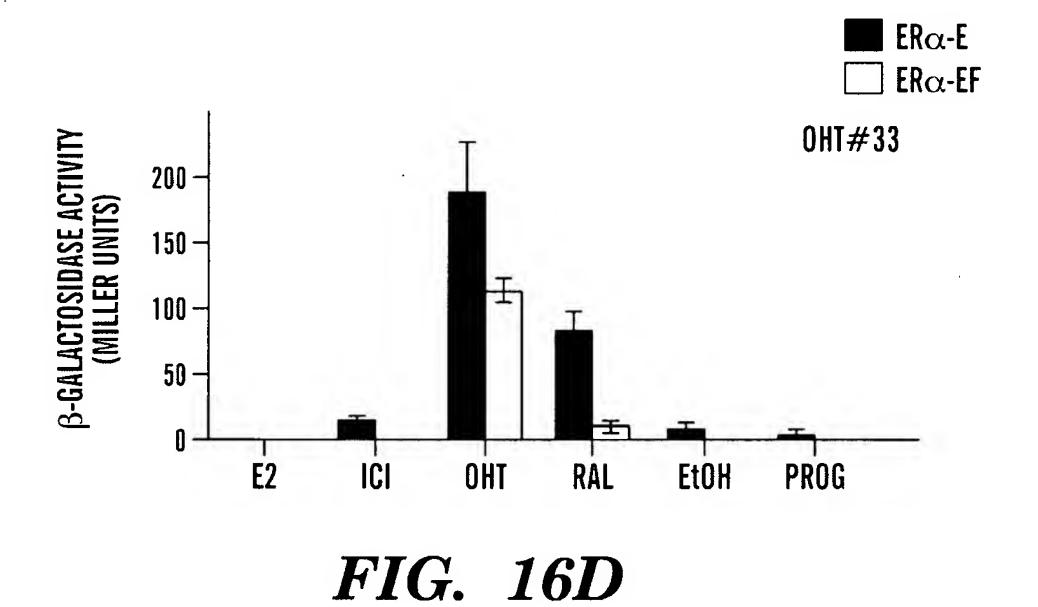


FIG. 16B





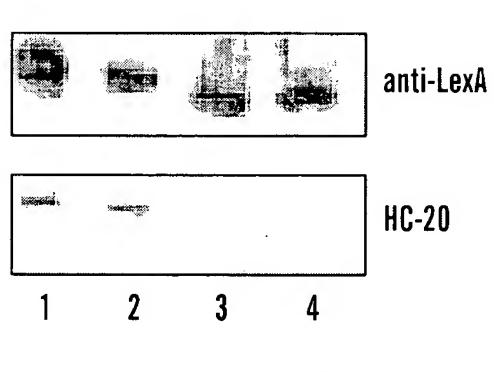
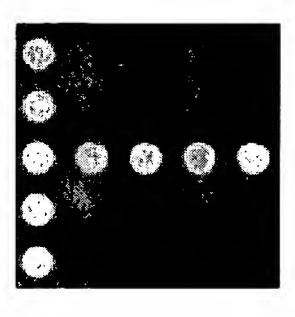


FIG. 16E

NEW SHEET

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HYDROXY TAMOXIFEN

ESTRADIOL

FIG. 17B

FIG. 17A

NO SELECTION (MASTER PLATE)

NO LIGAND

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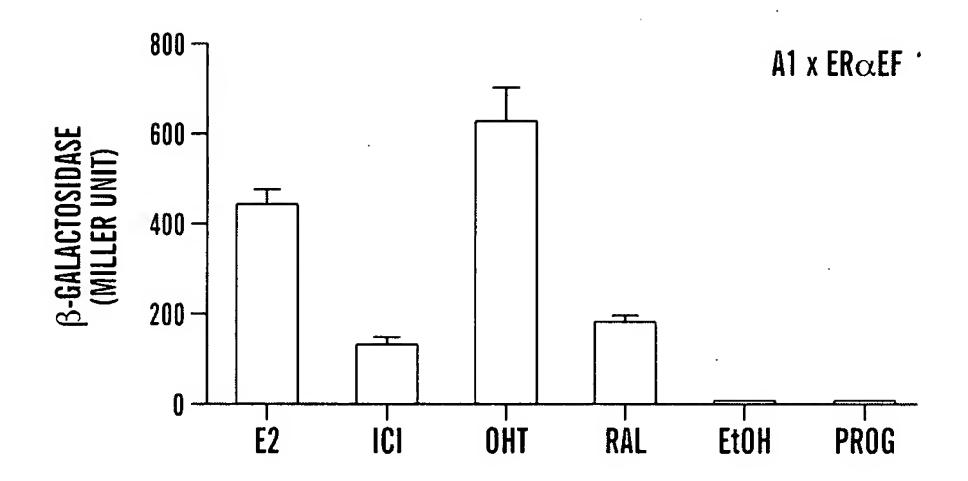


FIG. 18A

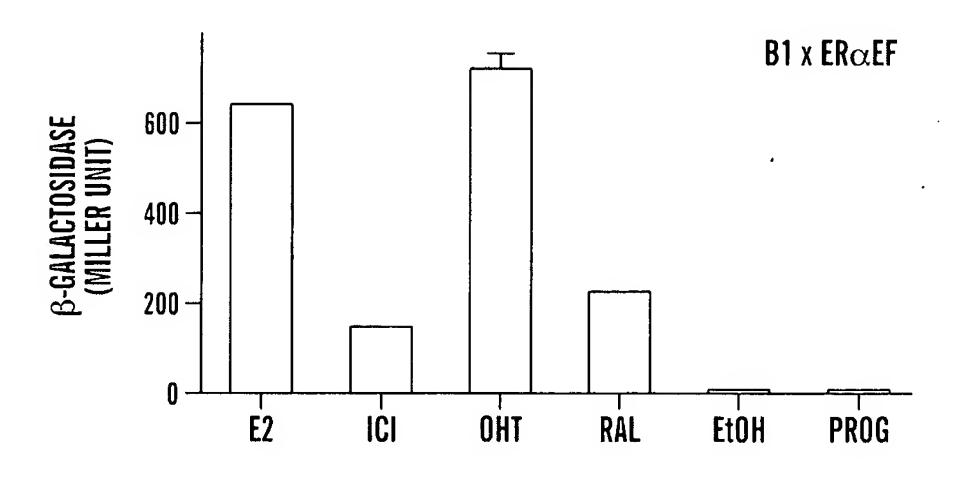


FIG. 18B

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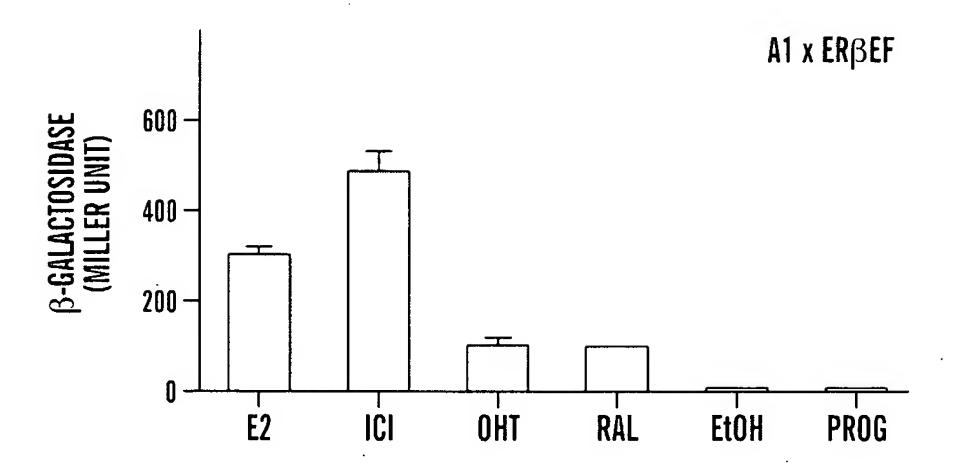


FIG. 18C

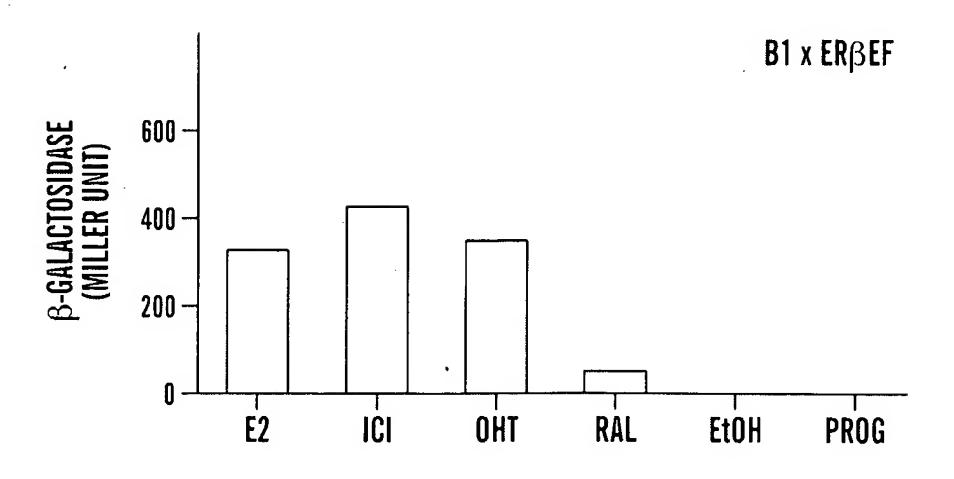


FIG. 18D